

# CAPACITOR ON THE SEMICONDUCTOR WAFER

## Abstract

A capacitor disposed on a silicon substrate is disclosed. The silicon substrate has a first region, a second region, and a third region, which is adjacent to the first region and the second region, defined on its surface. The capacitor has a bottom electrode disposed in the first region and the third region on the surface of the silicon substrate, a dielectric layer disposed on the bottom electrode and the substrate, and a top electrode disposed in the second region and the third region on the surface of the dielectric layer.